

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/046,594	10/29/2001	Stephen Y. Chou	600.426US2	3744	
1688 7590 07/10/2007 POLSTER, LIEDER, WOODRUFF & LUCCHESI			EXAMINER		
12412 POWER	412 POWERSCOURT DRIVE SUITE 200 VARGOT, MATHIEL  C. LOUIS, MO 63131-3615			IATHIEU D	
ST. LOUIS, M	O 63131-3615		ART UNIT PAPER NUMBER		
			1732		
			· · · · · · · · · · · · · · · · · · ·		
		•	MAIL DATE	DELIVERY MODE	
			07/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)	
	10/046,594	CHOU, STEPHEN Y.	
Office Action Summary	Examiner	Art Unit	
	Mathieu D. Vargot	1732	
The MAILING DATE of this communication app Period for Reply			
• •	/ IO OFT TO EVOIDE AMON	THE CONTRACTOR TO HER TAY (20) DAYO	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a reply vill apply and will expire SIX (6) MONTH , cause the application to become ABAN	TION.  be timely filed  from the mailing date of this communication.  DONED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on <u>08 A</u>	oril 2004.		
	action is non-final.		
3) Since this application is in condition for allowar		s, prosecution as to the merits is	
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.	·
Disposition of Claims			
4) Claim(s) <u>1,42-56 and 59-110</u> is/are pending in	the application.		
4a) Of the above claim(s) is/are withdraw			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1,42-56 and 59-110</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) acce	epted or b)⊡ objected to by	the Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyance	. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s)	is objected to. See 37 CFR 1.121(d).	
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached C	office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 1	19(a)-(d) or (f).	
1. Certified copies of the priority documents	s have been received		
2. ☐ Certified copies of the priority documents		lication No.	
3. Copies of the certified copies of the prior	• •		
application from the International Bureau			
* See the attached detailed Office action for a list	of the certified copies not re	ceived.	
Attachment(s)			
1) Notice of References Cited (PTO-892)		nmary (PTO-413) Mail Date	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10 sheets.	_	mal Patent Application	
	· — —		

Application/Control Number: 10/046,594 Page 2

Art Unit: 1732

1.Claims 64-83 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has added claims 64-83, and claim 64 contains a recitation to a film of a material that is "substantially insoluble in organic liquids" and states that the support exists at page 12, lines 7-10. However, there is no support for this limitation at the noted page and line. Applicant is requested to provide exactly where support exists for this recitation in claim 64 or cancel it.

- 2.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 105, 106, 108 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Napoli et al generally for reasons of record noting the following.

Napoli et al discloses the basic claimed method including (see the bottom of column 3) using a release agent on the mold; the reference is also submitted to teach first and second features—ie, a pattern is being impressed into the moldable material, and such would involve more than one feature. The basic difference between the instant claims and that taught in the applied reference appears to be the exact lateral dimension of 150 or 125 nm or less. It is noted that Napoli et al teaches dimensions of 600-700 nm,

Application/Control Number: 10/046,594

Art Unit: 1732

and it is respectfully submitted that the instant dimensions would have been obvious over these.

3.Claims 1, 42-56, 59-104, 107 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Napoli et al in view of European Patent Application 244,884 essentially for reasons of record noting the following.

Applicant has added new claims which essentially recite no more than what was already set forth in the previously rejected claims, and hence these claims are submitted to be rejected for reasons of record. Again, the exact lateral dimension would have been within the skill level of the art and certainly obvious from the nanometer dimensions disclosed in Napoli et al. Concerning the film that is "substantially insoluble in organic liquids"—ie, instant claim 64—it is submitted that such constitutes new matter as set forth in paragraph 1, supra. Further, it is noted that the polymers taught in Napoli et al. appear to be the instant ones, and hence it is unclear what differences exist if any. Finally, Napoli et al teaches that the polymeric film materials are soluble "[1]in general", which would indicate that some of them contemplated would not necessarily be soluble in solvents. At any rate, the selection of resins that would not be soluble is submitted to have been obvious. Also, concerning multilayered resist films, see Napoli et al, col. 4, line 53, which teaches that such are known in the art. At any rate, as already pointed out, these are conventional and would have been obvious dependent on exact pattern desired on the substrate. While Napoli et al may not choose to use them, their use certainly would have been obvious.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

Page 4

Art Unit: 1732

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 42-56 and 59-110 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-46 of copending Application No 10/244,276 in view of European Patent Application 244,844 essentially for reasons of record as set forth in paragraph 5 of the previous action.

5.Applicant's arguments filed April 8, 2004 have been fully considered but they are not persuasive. Applicant's comments concerning the exact lateral dimension are noted but are not persuasive. Napoli et al was filed in 1987 and patented in 1988. One of ordinary skill in this art would have expected that if dimensions down to 660 nm would be reached at that time, then surely the trend toward miniaturization would have rendered dimensions down to 110 or less nanometers as obvious by the time of the instant filing. The aspects noted by applicant concerning newly added claims 64-110 have already been addressed supra.

Application/Control Number: 10/046,594

Art Unit: 1732

6.**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on 571 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Application/Control Number: 10/046,594

**Art Unit: 1732** 

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot July 2, 2007 M. Vugst Mathieu D. Vargot Primary Examiner Art Unit 1732 Page 6

7/2/07